

# Security printing, everything of value is vulnerable

It is estimated that Dutch society suffers a billion euros in damage every year due to fraud with printed matter of value. Good security is certainly not a luxury. Two issues are central to the security of printed matter: counterfeiting and fraud. Or rather: preventing it. If the value represented by the printed matter is higher than that of the physical product, then it makes sense to think about security. Entrance tickets, ballot papers, savings stamps and transport documents are only of value if they are demonstrably REAL. Security therefore mainly consists of applying security features - the more valuable the product, the more 'bells and whistles'. Which security features are there, which are most suitable for your purpose? With a lot of secure printing, it is important that not only the end product, but the entire project at the printer is secured: from data management to the removal of misprints and transport. How can you be sure that there are no stitches during production?

### **Security features**

Securing printed matter is a profession in itself. Not every printer can do it. There are also few companies that have the equipment to apply a wide variety of security features - from the very simple to the very advanced - in and on printed matter and print. And having the technology in-house is not a sufficient guarantee of safety either. Who for

security printing really wants to sit well, opts for one of the few printers that is in possession of an international CWA certification. CWA-certified printers (such as Lijnco) are audited annually by the independent body Stichting VPGI Certificaat.

### **Security techniques**

In the printing practice there are quite a few possibilities to prevent forgery of valuable documents. Below is a selection of the most common. A combination of different techniques will always be used for good security.

## Microtext

A text in very small print on the document, intended to prevent counterfeiting. Unless a very sophisticated scanner or copier is used, the print will fill up on reproduction.Application, for example: management stationery, and as additional security for other documents.

## UV light mark

A text or image in UV-illuminating ink appears under UV light and is (usually) not visible in daylight. For documents with a unique numbering, the numbering can be printed in UV ink. A UV light mark can also be incorporated into the substrate, for example as luminescent fibers in paper. Application for example with: gift vouchers; upon receipt, the cashier can quickly and reliably check for authenticity.

## Unique numbering or unique barcodes

Unique numbering makes a document verifiable and traceable. Each document is given a unique number or barcode and the issue of the numbers/codes is registered. Application, for example: concert tickets, the code is scanned at the entrance to verify uniqueness.

### Thermo ink

Special ink that changes color with temperature changes. For example, a security feature in thermal ink can consist of a black area over an image, where the image only appears when the black area is heated.

Application for example: as a quick visual check for example entrance tickets.

# **Magnetic stripe**

This dark stripe on a parking ticket, for example, can be compared to a small piece of audio tape pasted on the card. Instead of sound, it stores digital information (data). This data can be read or changed with a magnetic head. Application for example with: checks or parking tickets.

## Watermark

A watermark is a thickening or thinning applied to the paper, through which an image (logo) can be seen against the light. The watermark has a unique place on each sheet.

Application, for example, with: stationery, vouchers, diplomas, certificates, guarantee certificates.

## (Micro)perforations

The perforation can be made in a special shape (for example a logo or other image). Such a perforation makes counterfeiting less easy. Application for example with: savings stamps, tickets.

### **Iris print**

Color gradient with unique mixing of colored inks. The colors run into each other so that they cannot be copied exactly.

Application, for example: gift vouchers.

# Holographic foils

The application of a hologram or a strip of holographic foil is the most common security method. The foil is available in countless patterns and can also be made with your own design (2D or 3D).

Application for example with: bus and train tickets, guarantee certificates.

# **Secure print production**

Naturally, the reliability of the printing company also plays a major role in the production of value printed matter. Do misprints end up in the paper bin or are they disposed of according to the guidelines? Can you be sure Are you sure that confidential information from your customers does not end up on the street? As a security printer (transport documents, tickets, ballot papers, vouchers, savings stamps, diplomas, etc.), we at Lijnco are very aware of the great importance of security during production, storage and transportation. We also guarantee matters that our clients have not yet thought of. Not only with ISO 9001 and the CWA 14641:2009 certifications, but also through our experience and know-how in this area. We think ahead and foresee the major consequences that a small deviation in the production of security documents can have for our clients. In that context, we developed our own software with which we can generate and register continuous number series (for example for lottery tickets).

# The future of print security

Lijnco has grown with the production of secure printing. This is the type of specialty printing we are passionate about. So we don't sit still. There are always new developments, new knowledge is needed and we continue to invest in technology. Interesting trends in print security are closely followed by our experts. For example, the application (e.g. with invisible ink) of augmented reality can give a new dimension to print and printing, not only in terms of marketing and communication value, but also in the prevention of counterfeiting and fraud. When a smartphone or tablet is zoomed in on the document, moving images appear, such as a movie or animation. This brings the printed matter to life and is a lot more difficult to copy.

The concept of printed electronics will also increasingly play a role in secure printing. This involves the production of electronic elements via a printing process with functional ink. In fact, you then print information in the existing process in the form of a printed 'chip', which can be read with a computer.

### **Minimize abuse**

Gone are the days when a fraudster could make his own money with a simple copy machine. The techniques for providing security features with security features are becoming increasingly sophisticated and the rules for data protection are strict. But the fact remains: what one can make, the other can imitate. It is our challenging task to limit misuse and counterfeiting to an absolute minimum with all our knowledge, experience and technology and through good cooperation with our clients.

# (050) 366 99 11 | info@lijnco.nl

Lijnco offers communication solutions from A to Z, with a focus on data analysis and personalization. Knowing more? Get in touch today.

